

indicus and its preparations, colchicum and its preparations, cyanuret of mercury, daturine, digitalis, and its preparations, elaterium and its preparations, black hellebore and its preparations, white hellebore and its preparations, emetine, tartar emetic, spurge and its preparations, euphorbium and its preparations, St. Ignatius' bean and its preparations, oil of cantharides, oil of hemlock, croton oil, oil of spurge, ioduret of ammonia, ioduret of arsenic, ioduret of potassium, ioduret of mercury, kermes mineral, lauro-cerasus and its preparations, laudanum and all its compounds and mixtures, jatropha curcas, golden sulphur of antimony, ergot and its preparations, stavesacre, turpeth mineral, arsenical liquor of Pearson, arsenical liquor of Fowler, morphine and its compounds, narcotine, narceine, narcisus, nicotianine, necotine, ammoniaco-mercurial nitrate, nitrate of mercury, opium, oxyd of mercury, pierotoxine, rhus radicans, savine, solanine, sulphate of mercury, tartrate of mercury, strychnine and its compounds, veratrine.

Among the enactments are the following—

1. Whoever wishes to engage in the sale of one or more of the above articles must make a declaration of the same before the Mayor of the Commune, stating the place of sale.

2. Chemists and manufacturers employing one or more of these are required to make a similar declaration. All of these are to be registered, and in case of removal to another place, due notice is to be given.

3. The above substances can alone be sold on the written request of the buyer, signed by him.

4. All purchases or sales are to be registered according to a form prescribed by the mayor or commissary of police.

5. The sale of poisonous substances for medical use, shall only be allowed to an apothecary on the prescription of a physician, surgeon, officer of health, or a brevetted veterinarian.

6. These prescriptions shall be signed, dated, and state in letters the dose of the respective substances, as well as the manner in which they are to be administered.

7. The apothecaries shall enter these prescriptions in a register, which shall at all times be open to legal inspection.

8. The apothecary, on delivering the medical prescription, shall annex to it a label stating his name and residence, and mentioning whether the article is to be used internally or externally.

9. Arsenic and its compounds may be sold for other than medical purposes, provided they be combined with other substances, and the formulas for these shall be prepared with the approbation of the Secretary of State of Agriculture and Commerce, to wit: For the treatment of domestic animals, by the Council of Professors of the Veterinary School of Alfort. For the destruction of hurtful animals and the preservation of objects of natural history, by the School of Pharmacy.

10. The sale of arsenic and its compounds are forbidden for the cleansing of grain, the embalming of the human body and the destruction of insects.

11. Poisonous substances should always be kept by merchants, manufacturers and apothecaries in a safe place and under lock and key.

12. The transportation or delivery of these articles should be made in the most careful manner.

The punishment for the infringement of these rules may be a fine from 100 to 3000 francs and imprisonment from six days to two months, and confiscation of the articles seized. This not to preclude criminal prosecutions, if the nature of the case requires it.—*Gazette des Tribunaux*, November 1, 1846.

MEDICAL EDUCATION.

73. *Edinburgh Statutes regarding the Degree.*—The statutes of the Medical Faculty of the University of Edinburgh, regulating the education of candidates for the degree of doctor in medicine have undergone, in the course of twenty-two years, from the end of 1824 to the present time, three changes. The first of these, in 1825, related to the *extension of the period of study from three to four years, and an increase in the number of the branches of education to be studied.* The second change,

which took place in 1831, related to the addition of two more branches of instruction to the curriculum. The third change, which took place in 1833, modified the curriculum, by rendering imperative four courses, two of which were previously optional; and by removing entirely one of the optional classes, viz., military surgery.

Previous to 1825 the curriculum of education qualifying for examination for the degree, consisted of one course of lectures on each of the seven following branches of medical education; viz., 1. Anatomy and Surgery; 2. Chemistry and Chemical Pharmacy; 3. Institutions of Medicine, embracing Physiology, Pathology and Therapeutics; 4. Materia Medica, with Dietetics; 5. Practice of Medicine; 6. Clinical Medicine, with Hospital Attendance; and 7. Botany. These lectures were to be attended in the course of three winters and one or two summers; the order left to the choice of the pupil.

In 1825 the Medical Faculty introduced two important changes. They lengthened the whole period of study from three to four years; allowing, however, one year to be taken out of the university, if accompanied with hospital attendance, and a course of dissection; to the seven courses already enjoined, they added a six months' course of lectures on Midwifery and the Diseases of Women and Children; and they further enjoined the candidate to attend two at least of any of the five following branches of education: 1. Practical Anatomy; 2. Natural History; 3. Legal Medicine; 4. Clinical Surgery; and 5. Military Surgery, each in courses of three months' duration; the selection of the two to be left to the student.

In 1831 two new lectureships, that on General Pathology, and that on Surgery, were added by order of government to the curriculum qualifying for examination for the degree. This raised the number of imperative courses to twelve.

In 1833 another important change was made. Of the optional classes, Practical Anatomy, Natural History, Forensic Medicine, and Clinical Surgery were imperatively and permanently added to the curriculum; while Military Surgery was altogether removed. As of these four classes two had been imperative—that is, were required to be attended, this added two more to the twelve previously required; thus raising the number to fourteen.

These fourteen were as follows:—

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|---|---|--|
| 1. Anatomy | } | During courses of six months. |
| 2. Chemistry | | |
| 3. Materia Medica and Pharmacy | | |
| 4. Institutes of Medicine and Physiology | | |
| 5. Practice of Medicine | | |
| 6. General Pathology | | |
| 7. Surgery | | |
| 8. Midwifery and the Diseases of Women and Children | | |
| 9. Practical Anatomy | | |
| 10. Clinical Medicine during one course of six months or two courses of three months. | } | During courses of at least three months. |
| 11. Clinical Surgery | | |
| 12. Forensic Medicine | | |
| 13. Botany | | |
| 14. Natural History, including Zoology | | |

Of these changes we gave accounts, publishing at the same time the statutes prescribing them in the 23d (p. 421) (1825), and 41st (p. 250) (1837) volumes of this Journal. To these volumes we refer the reader for specific information, and the reasons assigned for the changes.

We have now to record a fourth change of considerable importance, neither increasing nor diminishing the course of education; but relating to the persons from whom the courses may be taken.

With the conviction of the necessity for reform in medical education and practice, which has been for many years taking possession of the minds of the profession, the idea that it might be eligible, to allow a portion of the education for the degree to be taken from teachers not in any university, and, in short, without the walls of a university, had taken a firm hold of the thoughts of many, both individuals and boards. In 1834 the Colleges of Physicians and of Surgeons in this city had appointed committees to consider the whole subject of medical reform, and especially that of medical education; and they drew up various resolutions

calculated to improve medical education, and to introduce uniformity among the licensing boards.

In 1838 the College of Surgeons of this place resumed the consideration of the subject, and on the 8th of October a committee was appointed by the College of Physicians to confer and deliberate with similar committees from the Medical Faculty and the College of Surgeons. This joint committee, after various meetings, presented, on the 27th October, 1838, a report, embracing a series of resolutions, in which the representatives of the three bodies had agreed; and which report was approved by the college at a meeting of the 28th November, 1838, though not finally or entirely adopted. Among other propositions was contained one, that it was fair and reasonable that one-third of the classes or courses of instruction for the medical degree, to be selected by the students, should be allowed to be taken without the university, that is, from qualified, though extra-academical teachers. Time being taken to consider the individual clauses and propositions of the report, it was, with some slight modification, adopted at an extraordinary meeting of the 16th March, 1839; and the recommendation in favour of allowing one-third of the classes requisite for graduation to be taken without the University, was carried by a large majority.

Subsequent to that time, all plans of reform and improvement in medical education have been arranged with the understanding now stated; and both the colleges have looked on it as a condition necessary to any proper plan of reform. At one time several of the extra-academical lecturers applied to the patrons to have this proposition considered and sanctioned by them. But the patrons declined interfering, on the ground that the legislature were understood to be preparing a general measure for improving medical education and practice, and in which this proposition would receive just attention. After the failure of the several legislative measures brought forward with the intention now specified, the idea of leaving it to the legislature was given up.

In 1845, with the Medical Faculty itself originated a proposition for opening up, as it has been called, the system of instruction prescribed for graduation. The faculty then proposed that three-fourths of the requisite course of instruction might be taken in London or Dublin, from lecturers or teachers connected with hospitals or otherwise recognized and accredited, and one-fourth within the walls of the University. But no mention was made of recognizing the extra-academical lecturers of Edinburgh, as authorized to give any portion of this instruction.

This proposition was not agreeable to the Royal Colleges here or to the lecturers. The colleges remonstrated in separate memorials to the patrons, entreating them either to make no change, or to place all extra-academical lecturers, whether in London, Dublin, or Edinburgh, on a footing of equality. The lecturers also memorialized the patrons to the same effect. The result was that the proposition of the medical faculty did not receive the sanction of the patrons. Subsequently the patrons authorized the college committee to consider the matter and report. Their report, at the end of some time, was presented recommending the adoption of the plan originally proposed in 1838 by the two colleges.

The following extract, from this report presents all the points of interest to us in this country.

"The subject has again fully occupied the attention of the committee, and they beg now to report as follows:—

"1. That, by the statutes presently in force, four years of study are required in order to qualify a student to become a candidate for the degree of M. D.;* during his curriculum he must attend fourteen different classes; such attendance can only be given in this or in some other university having power to confer the degree; one year's attendance is, however, required in the University of Edinburgh.

* An exception is made in favour of those students, who, in addition to three anni medici in a university, have attended, during six months at least, the medical or surgical practice of a general hospital, which accommodates not less than eighty patients, and, during the same period, a course of practical anatomy; in which case, three years of university study are admitted, provided the students have attended, during the three university years, all the classes required by the statutes, with the exception of practical anatomy, under professors in a university.

"2. That the Senatus propose to change this system, in so far as to place teachers of medicine connected with the London Hospital schools, and the school of the College of Surgeons in Dublin, on a level with professors in other universities.

"3. That in this way, a student, after completing his course of study by attendance for three years at the London or Dublin Extra-Academical Schools, and one at the University of Edinburgh, might present himself as a candidate for the degree.

"4. That the Extra-Academical Lecturers of Edinburgh claim an equality of privilege with the teachers of the hospital schools of London, and the School of the College of Surgeons of Dublin; and that the Colleges of Physicians and Surgeons concur in opinion that this claim should be conceded, while the Medical Faculty object to the concession.

"5. That while the University is entitled to the chief regard of the patrons, it is of importance to the interests of medical science, and of the city to foster the Extra-Academical School of Edinburgh, to which the University is indebted for eight of the twelve professors at present composing the faculty of medicine; and, in the opinion of the committee, the claim of the Edinburgh Extra-Academical School to an equality of privilege with the schools of London and Dublin, is fair and reasonable, and ought to be conceded by the patrons. At the same time, the committee cannot help thinking, that the Medical Faculty of the University have gone too far in proposing to open up the curriculum to the extent of three years out of four, in favour of the schools of London and Dublin. No doubt, when they did this, they proposed to exclude the Extra-Academical School of Edinburgh from all advantage, excepting that to be gained by the attendance of those students who might choose to repeat any particular course, which they were at liberty to do without the University. But, as the committee differ with the Medical Faculty on this point, and propose to place the aforesaid Extra-Academical Schools of London, Dublin and Edinburgh on an equality, so they recommend that the council should not now go farther than carry out the principle of the recommendation contained in the report of 7th April, 1842, extending it, however, to the said Schools of London and Dublin, and thus permit candidates for medical degrees to take one-third of the imperative classes under teachers in any one of these Extra-Academical Schools.

"6. That to carry this object into effect, the committee propose that the council should add the following section to the statutes transmitted by the Medical Faculty in November last, and should also make some verbal alterations on the statutes, that they may be consistent with the section to be introduced:—

"Attendance on the lectures of teachers of medicine in the hospital schools of London, or school of the College of Surgeons in Dublin, or of teachers of medicine in Edinburgh, recognized as such by the Royal Colleges of Physicians and Surgeons of Edinburgh (in accordance with regulations to be adopted by these colleges jointly, and approved of by the patrons of the University), shall to the extent of one-third of the whole departments required by Section II., Clause 1, to be studied by candidates, be held equivalent to attendance under professors in this or in some other university, as already defined. And such attendance shall be available to candidates to the extent of one of the four years of study required by Section I., provided it has embraced, in one year, at least two six months' courses of lectures, or one of these and two three months' courses.

"7. That the committee have guarded the concession by requiring that the Extra-Academical Teachers of Edinburgh, whose certificates of attendance shall be received as qualifying candidates for the degree, shall be teachers of medicine, recognized as such by the Royal Colleges of Physicians and Surgeons, in accordance with regulations to be adopted by these colleges jointly, and approved of by the patrons of the University. One of these regulations, the committee are of opinion, should be to the effect, that for every ticket to be ultimately presented as evidence of attendance with a view to graduation, there shall be paid a fee of the same amount with that exigible by the medical professors in the University. To this arrangement the committee are hopeful that these learned bodies will not offer any objection.

"The committee subjoin to this report the statutes as transmitted by the Medical

Faculty, in November last, showing in foot-notes the words which they have recommended to be deleted, and in italics those which they propose shall be added.

"The statutes, as thus amended, the committee recommend should be sanctioned by the patrons."

The following are the *Statutes of the University of Edinburgh relative to the degree of M. D.*, now in force.—Sect. I. "No one shall be admitted to the examinations for the degree of Doctor of Medicine who has not been engaged in medical study for four years, during at least six months of each, in the University of Edinburgh, or in some other university where the degree of M. D. is given;* unless, in addition to the three medical sessions so constituted, he has attended, during at least six winter months, the medical or surgical practice of a general hospital, which accommodates at least eighty patients, and during the same period a course of practical anatomy.

"Sect. II. No one shall be admitted to the examinations for the degree of doctor who has not given sufficient evidence,—

"1. That he has studied, once at least, each of the following departments of medical science, under professor† of medicine, in this or in some other university,‡ as already defined, viz :—

Anatomy	}	During courses of six months.
Chemistry		
Materia Medica and Pharmacy		
Institutes of Medicine or Physiology		
Practice of Medicine		
Surgery	}	During courses of six months.
Midwifery, and the Diseases peculiar to Women and Children		
General Pathology, or, in schools where there is no such course, a three months' course of lectures on Morbid Anatomy, together with a supplemental course of Practice of Medicine, or Clinical Medicine		
Practical Anatomy (unless it has been attended in the year of extra-academical study allowed by Sect. I.)		
Clinical Medicine, that is, the treatment of patients in a public hospital, under a professor of medicine, by whom lectures on the cases are given		
Clinical Surgery	}	During courses of at least three months.
Medical Jurisprudence		
Botany		
Natural History, including Zoology		

"2. That in each year of his academical studies in medicine, he has attended at least two six months' courses of lectures, or one of these and two three months' courses.

"3. That, besides the course of clinical medicine already prescribed, he has attended, for at least six months of another year, the medical or surgical practice of a general hospital, either at Edinburgh or elsewhere, which accommodates not fewer than eighty patients.

"4. That he has been engaged, for at least six months, by apprenticeship or otherwise, in compounding and dispensing drugs at the laboratory of an hospital, dispensary, member of a surgical college or faculty, licentiate of the London or Dublin society of apothecaries, or a professional chemist or druggist.

"5. That he has attended, for at least six months, by apprenticeship or otherwise, the out-practice of an hospital, or the practice of a dispensary, physician, surgeon, or member of the London or Dublin society of apothecaries.

"Sect. III.—Attendance on the lectures of teachers of medicine in the hospital schools of London, or school of the College of Surgeons in Dublin, or of teachers of medicine in

* The words, "in the hospital schools of London,—or in the school of the College of Surgeons in Dublin," have been deleted.

† The words, "or teachers," have been deleted.

‡ The word "university" has been substituted for that of "school."

Edinburgh, recognized as such by the Royal Colleges of Physicians and Surgeons of Edinburgh (in accordance with regulations to be adopted by these colleges jointly, and approved of by the patrons of the University), shall to the extent of one-third of the whole departments required by Sect. II., Clause 1, to be studied by candidates, be held equivalent to attendance under professors in this or in some other University, as already defined. And such attendance shall be available to candidates to the extent of one of the four years of study required by Section I., provided it has embraced, in one year, at least two six months' courses of lectures, or one of these, and two three months' courses.

"Sect. IV.* No one shall obtain the degree of doctor who has not studied in the manner already prescribed, for at least one year previous to his graduation, in the University of Edinburgh.

"Sect. V. Every candidate must deliver, before the 31st of March of the year in which he proposes to graduate, to the Dean of the Faculty of Medicine,—

"1. A declaration, in his own handwriting, that he is twenty-one years of age, or will be so before the day of graduation; and that he will not be then under articles of apprenticeship to any surgeon or other master.

"2. A statement of his studies, as well in literature and philosophy as in medicine, accompanied with proper certificates.

"3. A medical dissertation composed by himself, in Latin or English; to be perused by a professor, and subject to his approval.

"Sect. VI. Before a candidate be examined in medicine, the medical faculty shall ascertain, by examination, that he possesses a competent knowledge of the Latin language.

"Sect. VII. If the faculty be satisfied on this point, they shall proceed to examine him, either *viva voce*, or in writing; first, on anatomy, chemistry, botany, institutes of medicine, and natural history, bearing chiefly on zoology; and, secondly, on materia medica, pathology, practice of medicine, surgery, midwifery, and medical jurisprudence.

"Sect. VIII. Students who profess themselves ready to submit to an examination on the first division of these subjects, at the end of the third year of their studies, shall be admitted to it at that time.

"Sect. IX. If any one, at these private examinations, be found unqualified for the degree, he must study during another year two of the subjects prescribed in Section II., Clause 1, in this or some other university,† as above defined, before he can be admitted to another examination.

"Sect. X. Should he be approved of, he will be allowed but not required to print his thesis; and, if printed, forty copies of it must be delivered before the 25th day of July to the Dean of the Medical Faculty.

"Sect. XI. If the candidate have satisfied the medical faculty, the dean shall lay the proceedings before the Senatus Academicus, by whose authority the candidate shall be summoned, on the 31st of July, to defend his thesis; and, finally, if the senate think fit, he shall be admitted, on the first lawful day of August, to the degree of doctor.

"Sect. XII. The Senatus Academicus, on the day here appointed, shall assemble at ten o'clock, A. M., for the purpose of conferring the degree; and no candidate, unless a sufficient reason be assigned, shall absent himself, on pain of being refused his degree for that year.

"Sect. XIII. Candidates for graduation shall be required to produce evidence of their having conformed to those regulations which were in force at the time they commenced their medical studies in a university."

74. *Medical Organization in Spain.*—Agreeably to a government decree, dated Sept. 5th, 1846, five faculties of medicine are established in Spain—viz., at Madrid, Cadiz, Valencia, Barcelona, and Santiago. The medical college of Madrid

* The numbers of this and the following sections have been altered by reason of the introduction of the 3d, as an additional section.

† The word "university" has been substituted for that of "school."